PREMIX
SHAPING THE WORLD OF COMPOSITES

Premi-Glas® 2103-20 CR-SX

Bulk Molding Compound

Technical Data Sheet

Typical Application — Electrical/Flame Retardant

Premi-Glas® 2103-20 CR-SX is a fiberglass reinforced thermoset bulk molding compound for electrical and flame retardant applications.

Key Features and Benefits:

- Non-Halogen FR technology for regulatory compliance.
- Good dimensional stability, including excellent thermal resistance.
- Pigmentable for molded-in color; best appearance with mold texture.
- Recognized by Underwriters Laboratories, File # E42524.
- Underwriters Laboratories 94-VO flame resistance at 2.5mm thickness.

Typical Values. Mechanical values are for Specimens cut from Compression-Molded panels.			
Properties	Test Method	Values (US)	Values (Metric)
Flexural Strength	ASTM D-790	16,000 psi	110 MPa
Flexural Modulus	ASTM D-790	1.5×10^6 psi	10 GPa
Tensile Strength	ASTM D-638	5,500 psi	38 MPa
Tensile Modulus	ASTM D-638	1.8×10^6 psi	12 GPa
Notched Izod	ASTM D 256	8 ft*lb/in	425 Joules/m
Unnotched Impact	ASTM D 4812	10 ft*lb/in	530 Joules/m
UL Relative Thermal Index (electrical)	UL 746C	266 deg F	130 deg C
UL Relative Thermal Index (mechanical)	UL 746C	266 deg F	130 deg C
UL Relative Thermal Index (impact)	UL 746C	266 deg F	130 deg C
Flame Resistance	U.L. 94 V0	Pass, 0.100 in	Pass, 2.5 mm
Dielectric Strength, KV/mm	ASTM D149	380 Volts/mil	15 kV/mm
Arc resistance, seconds	ASTM D495	180 sec	180 sec

This BMC product is generally intended to be compression or injection molded in matched metal die molds, typically at 300°F (150°C) and 500 to 1000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process. Nominal values for polymerization shrinkage (0.0015 to 0.0035 in/in) and specific gravity (1.70 to 1.85) may be customized for individual applications. Contact your Premix sales representative for specific design recommendations.

Following physical characteristics are typical of this product:

CLTE, XY direction: 25 ppm/ deg C
CLTE, Z direction: 35 ppm/deg C
Thermal Conductivity: 0.3 W/m*deg K
Poisson's Ratio: 0.3